



# Horsehead Shoreline & Shallow Water Habitat Restoration

**Location:** Horsehead Environmental Center  
Queen Anne's County, MD

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The Horsehead Project was designed and implemented to demonstrate

ecologically sound methods for shoreline and shallow water habitat restoration.

The installation of **marsh breakwaters**, construction of an oyster reef (which will also serve as the first line of defense against wave energy), and the stabilization of 400 linear feet of failing concrete bulkhead were the main restoration components of the project.

Demonstrating the beneficial use of materials that are typically considered waste was also very important. Sandy dredge material was used to build the islands and restore the shoreline, and building rubble from Baltimore's Memorial Stadium was used to construct the oyster reefs.

Prior to these restoration efforts, the shoreline consisted of very little usable habitat. By designing with nature, an offshore environment has been created for fish in the form of *fish havens*, and beach habitat was improved to attract nesting animals such as Diamondback Terrapin and Horseshoe Crabs.



*Aerial view of Horsehead Environmental Center and completed restoration structures.*



*Rubble material from Baltimore's Memorial Stadium is used to build oyster habitat.*



*Concrete fish havens are installed offshore to provide additional aquatic habitat.*

Restoration at the Site Level

## GOALS & OBJECTIVES

- **Utilize an ecosystem approach to stabilize 400 linear feet of failing concrete bulkhead.**
- **Create a 1 acre oyster reef sanctuary to provide fish and oyster habitat, and to serve as a break for wave energy approaching shoreline.**
- **Create nearly two acres of tidal wetlands and beach strand to protect shoreline and expand shorebird nesting habitat.**